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1. INTRODUCTION

The era that is increasingly developing causes technology to grow without limits. Currently, social media has become easily accessible to humans and can be used as a place for human interaction. Social media will be easily accessed by humans and can be used as a place to interact with humans. As of January 2022, there are 191.4 million social media users in Indonesia[1]. In Indonesia, Twitter is a popular social media. There are 18.45 million users of the Twitter application as of January 2022[2]. Twitter is a platform that humans can use to be able to interact by giving tweets. These tweets are used to present how the personality of that person. Personality is a trait that can be used as a characteristic to distinguish it from others seen in behavior, way of speaking, thinking, and others [3]. To find out someone's personality can be done by conducting interviews or by giving a questionnaire. Personality can be used as a benchmark that can be used as a reference in seeing the daily life of that person, then how one interacts with other people and can also be used as a reference in terms of finding a job according to one's personality. One's personality can be known by one of the methods, namely the Big Five Personality method. With this method, five personalities are obtained, namely extraversion, agreeableness, conscientiousness, neuroticism and openness [4].

Research on personality classification has been carried out using several methods. One of the studies conducted by Sedrick Scott Keh, I-Tsun Cheng entitled Myers-Briggs Personality Classification and Personality-Specific Language Generation Using Pre-trained Language Models, from this study it can be concluded that the BERT model can be used to predict personality types MBTI. The results of this study showed that the BERT model yielded an accuracy of 0.47 by successfully predicting class personality on the MBTI personality and obtaining an accuracy of 0.86 by successfully predicting two types of MBTI personality [5]. In another study conducted by Amirmohammad Kazameini, Samin Fatehi, Yash Mehta, Sauleh Eetemadi, Erik Cambria, from this study the BERT model was used to extract contextual word embedding from textual data to perform personality detection after using the BERT model to extract contextual words then used for the Bagged-SVM classification which is used for personality classification and the results obtained for this classification get an increase of 1.04%[6]. Another research conducted by Alireza Souri, Shafigheh Hosseinpour and Amir Masoud Rahmani entitled Personality Classification based on the profile of social network users and the five-factor model of personality using several methods, namely Naïve Baiyes, Boosting Naïve Baiyes, Neural Network, 6 Boosting Neural Network, Decision Tree, Boosting Decision Tree, Support Vector Machine (SVM), and Boosting Support Vector Machine (SVM). The results of this study are the most accurate Boosting Decision Tree with an accuracy of 82.2% [7].Another study conducted by Ghina Dwi Salsabila and Erwin Budi Setiawan, this study used data originating from Twitter with a total of 511,617 tweets. The model used in the study was SVM which was then combined with the BERT model as a semantic approach that obtained the best results used to be able to predict personality with an accuracy of 80.07%[8]. Another study conducted by Kamal El-Demerdash, Reda A. El-Khoribi, Mahmoud A. Ismail Shoman, and Sherif Abdou entitled Deep learning based fusion strategies for personality prediction using BERT, ULMFiT and ELMo methods. The results of the study stated that BERT had the highest average accuracy rate, with a value of 60.43% [9].

Thus, a person's personality can be classified through uploads on social media, especially Twitter, with different levels of accuracy according to the method used. Bidirectional Encoder Representation From Transformers (BERT) is a deep learning algorithm that can be used to be able to work on natural language processing [10]. The advantage of BERT is understanding unclear words in the text and then converting them into words that are appropriate to the context and simultaneously processing all the words in the text [11]. There has yet to be any research from previous research to classify personality from social media, especially Twitter, using the BERT model used as a classifier. This research can help to understand a person's personality, which can be used as a reference when looking for a job that fits his personality and to find out how a person interacts with others without the need to conduct interviews or give questionnaires.